FISA DE LUCRU

1* Efectuați:

a) $(x+3)^2$; b) $(2t+1)^2$; c) $(5+3a)^2$; d) $(2x+5y)^2$;

2* Efectuați:

a) $(x-a)^2$; b) $(-x+y)^2$; c) $(3x^2-y)^2$; d) $(2x-5y^3)^2$;

3* Efectuați:

a) $\left(2-\sqrt{3}\right)^2$; b) $\left(-\sqrt{5}+3\right)^2$; c) $\left(\sqrt{7}-\sqrt{3}\right)^2$;

4* Efectuați:

a) $(x+a)(x-a)$; b) $(x+3)(x-3)$; c) $(t+7)(7-t)$;

5** Efectuați:

a) $(x+1)^2-2x$; b) $4x+(2-x)^2$;
c) $x^2+(10-x)(10+x)$; d) $x(x+6)-(x+3)^2$;

6** Efectuați:

a) $(x+2)^2+(x+3)^2-(2x+1)(x+2)$; b) $(2x-3)^2+(4x-2)(5-x)$;
c) $(5x+3)(x-1)-(x-1)^2-(2x-1)^2$; d) $(a+2b)^2-(a+1)^2-(2b+1)^2$.

7** Efectuați:

a) $(a+1)^2-2(a+1)(b+1)+(b+1)^2$; b) $(2x+3)^2-2(2x+3)(2x+1)+(2x+1)^2$;
c) $(-3x+5)^2-(-3x-1)^2$; d) $(-2a-3x)^2-(-3x+2a)^2-24ax$.

8** Efectuați:

a) $(x+1)(x-1)(x^2+1)$; b) $(2+a)(2^2+a^2)(2^4+a^4)(2-a)$;
c) $(x^2+1+x)(x^2+1-x)$; d) $(x^2-x+2)(x^2+x+2)$.

9** Calculați:

a) $\left(\sqrt{2}+1\right)^2-\sqrt{8}$; b) $\sqrt{48}+\left(2-\sqrt{3}\right)^2$;

10** Efectuați:

a) $\left(1-\sqrt{3}\right)^2-\left(1+\sqrt{3}\right)^2\left(1-\sqrt{3}\right)$; b) $\left(2\sqrt{7}-5\right)\left(5+2\sqrt{7}\right)-\left(1-\sqrt{2}\right)^2$;

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9** Calculați:

a) $\left(\sqrt{2}+1\right)^2-\sqrt{8}$; b) $\sqrt{48}+\left(2-\sqrt{3}\right)^2$;

10** Efectuați:

a) $\left(1-\sqrt{3}\right)^2-\left(1+\sqrt{3}\right)^2\left(1-\sqrt{3}\right)$; b) $\left(2\sqrt{7}-5\right)\left(5+2\sqrt{7}\right)-\left(1-\sqrt{2}\right)^2$;